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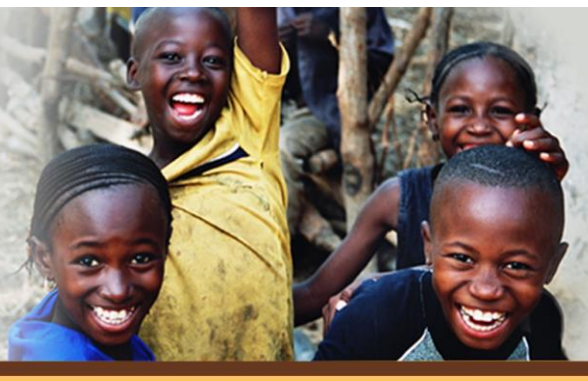

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Public climate finance: the challenge of reporting equity

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Content

List of acronyms

Abbreviation	Explanation
AREF	Africa Renewable Energy Fund
BRs	Biennial Reports
CIV	Collective Investment Vehicle
DAC	Development Assistance Committee
DFI	Development Finance Institution
GCF	Green Climate Fund
GE	Grant Equivalent
LCR	Low Carbon Climate Resilient
NCs	National Communications
ODA	Official Development Assistance
OOF	Other Official Flows
PA	Paris Agreement
PSI	Private Sector Instrument

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Abstract

There is currently no agreed comprehensive methodology on how to track and report on public climate finance. One of the difficulties – next to determining the climate relevance of projects funded– is the *valuation of financial instruments other than grants* (i.e. loans, guarantees, equity). For loans, the calculation of the grant equivalent of the financial flow is relatively straightforward, but for equity, it is unclear what the best way is to value the grant equivalent. Hence, the primary objective of this research paper is to provide an overview of the variety of methods that can be used to value the provision of public climate finance to developing countries through equity investments. In this endeavour, special attention will be paid to recent debates taking place in the context of the modernisation of the OECD DAC statistical system about how to better represent the donor effort involved in extending private sector instruments and especially equity investments.

JEL Classification: F35, Q56

Keywords: Keywords: Public climate finance, private climate finance, equity, OECD-DAC, non-grant instruments, public sector instruments, tracking climate finance, developing countries, UNFCCC

0 | Summary

Background and main aim of the paper

There is currently no agreed comprehensive methodology on how to value financial instruments related to the provision of public climate finance to developing countries. To date, contributing countries mostly account for all financial instruments at their cash face value, a method which, notwithstanding its simplicity, tends to over-estimate figures related to loans, and other non-grant instruments (i.e. equity, guarantees) and hence weakens the comparability and reliability of the data. This situation is made worse by the fact that under the UNFCCC, there is as yet no common definition of concessionality. Reporting practices up to now have shown that concessionality is not likely to be a condition for OOF public climate flows in the future. We will therefore assume that non-concessional flows will be reported as public climate finance under the UNFCCC framework in the future.

To ensure greater clarity and transparency of climate finance reporting, improved accounting methodologies for public climate finance are urgently needed. In this regard, emphasis should be placed on measurement approaches that can, in contrast to the cash face value method, account for potential reflows.

As a step towards addressing these issues, this research paper's main objective is to provide the Belgian Development Cooperation with an overview of methods that can be used to report on public climate-related equity finance, i.e. climate finance provided to developing countries through the use of equity instruments. In so doing, we suggest that important insights can be gained from recent debates in the OECD-Development Assistance Committee (DAC) concerning the modernisation of Official Development Assistance (ODA) reporting, an ongoing process which, among other things, includes efforts to better represent in ODA, the provision of development finance through the use of private sector instruments (PSIs) (e.g. guarantees, mezzanine finance, and equity) and to better incentivise their use. Overall, this discussion will support the Belgian Development Cooperation community to improve the reporting of present and future climate-related support provided via equity investments to developing countries, either directly to companies or projects in developing countries, or indirectly through national and international financial vehicles or umbrella funds.

The OECD DAC modernisation process and the valuation of private sector instruments (PSIs)

In December 2014, as part of global efforts to scale up the financial resources required for the 2030 Sustainable Development Agenda and to ensure their transparency and accountability, members of the OECD DAC launched a process of modernising their statistical system. One of the key objectives of this process was to improve the representation of the donor effort involved in extending private sector instruments (PSIs) (i.e. guarantees, mezzanine finance, and equity) in external development finance, to reduce the current disincentives for their use, and promote greater engagement with the private sector in developing countries. Such ongoing efforts have led to some discussions on how equity instruments and other PSIs such as

guarantees, can be better valorised within ODA and the new measure of Total Official Support for Sustainable Development (TOSSD). Whilst substantial work still remains to be done on the implementation details of these principles, those already provide interesting insights on how to potentially better represent equity instruments in ODA and relatedly, in reports of public climate finance provided to developing countries.

How to better capture equity instruments in ODA: inputs from the OECD DAC modernisation process

Broadly defined, equity financing refers to the provision of capital in a project, company, or fund, in exchange of a corresponding share in that company, project, or fund's portfolio. Along with debt and de-risking instruments, equity instruments have the potential to generate future financial reflows. In the case of equity however, returns on investments cannot be guaranteed in advance as they depend on the project's or company's economic performance for the duration of the investment, which is the main reason why equity is generally considered riskier than debt financing.

The core challenge with development or climate-related finance provided through equity instruments is that it is technically difficult to quantify. This is especially the case with respect to calculating the grant equivalent (GE) portion of such flows. By determining the "actual" economic value of a financial instrument, the GE calculation method provides for a more realistic comparison of grant- and non-grant instruments and incentivises the use of financial instruments with a higher degree of concessionality (higher amount of GE portion). But whilst the calculation of the GE of financial flows is relatively straightforward for loans because most of the financial terms of the financial transaction are known upfront, the calculation of the GE of equity instruments is technically difficult for several reasons. They include uncertainty about the amount of future repayments; the highly subjective nature of risk assessments; and the often considerable difference between the expected rate of returns and the actual returns.

What this suggests overall, is that more analysis is needed to determine whether non-grant instruments such as equity can be possibly be considered concessional and if so, on which terms. Note that there is presently no commonly agreed definition under the OECD of what concessionality entails in relation to these instruments (except for loans provided to public/official institutions). Additionally, we need to understand better whether the calculation of the GE is applicable to instruments such as equity that have uncertain payoffs and unclear risks assessment criteria.

It is in this context that as part of the OECD DAC's process of modernisation of ODA reporting, two different measurement approaches have been proposed in an effort to better represent in ODA, the actual support provided by donors to developing countries through the use of equity and other private sector instruments. These are the institutional and the instrument-specific approaches. These two approaches differ mainly in that they involve different points of measurement. Under the institutional approach for instance, the measurement of the donor effort is based on the donor's financial contributions to - and divestments from - a national financial vehicle which provides ODA-eligible funds to a developing country. Under the instrument-specific approach in contrast, the donor effort is measured on an instrument-by

instrument basis. In other terms, the calculation focuses on each PSI transaction between an ODA-eligible vehicle in a donor county and a private enterprise, project or fund located in or providing funds to a developing country. Under the two approaches, the effort of the official sector in deploying PSIs will be counted in ODA, while total outflows from providers will be captured in the broader measure on total flows for sustainable development (TOSSD).

Note that in order to minimise the risks of double counting, members in their ODA reporting are required to apply only one approach for each financial vehicle. They can change the approach selected, granting prior notification and verification to the ODA secretariat. Moreover, and to ensure the credibility and comparability of members' reporting over time, a lock-in period during which the approach may not be changed is to be determined.

These two approaches ultimately lead to distinct ways of estimating equity instruments in ODA. Under the institutional approach, the calculation method proposed by DAC members at the 2016 HLM, suggests to account for a donor government's capital investments in – and divestments from - the ODA eligible DFI or vehicle on a net flow basis, with initial capital contributions counted as positive ODA and potential future reflows counted as negative ODA.

Under the instrument-specific approach, the quantification method varies depending on the type of PSI used by a vehicle to provide financing to a private enterprise or partner institution in a developing country. For all instruments however, it was agreed that the donor effort should be calculated (whenever possible) based on the estimation of the grant equivalent and only instruments providing finance at concessional level (i.e. below market rates) should be included in ODA. Note that this concessionality criterion ultimately requires determining for each instrument, whether the instrument is concessional in character and if so, to what extent.

However, and as mentioned earlier, the calculation of the GE portion of equity investments remains technically challenging: neither the appropriate (expected) discount rate, nor future cash flows can be known upfront. These difficulties notwithstanding, at a 2014 Expert Reference Group Meeting on "better representing the donor effort in non-grant instruments," several options for reporting on equity investments in ODA were explored for further discussion. They include the 6 methodological options summarised in the following table:

Table- Proposed options for reporting equity under the instrument-specific approach

Methodological options	Description	Technical Feasibility
(1) Net cash flows	Current method of reporting in DAC statistics: Reporting as: - **Positive ODA**: the amounts of initial investments - **Negative ODA:** the amounts of from divestments (dividends are not included)	**Yes** – Easy to use
(2) Net cash flows limited to initial investment value	Reporting as: - **Positive ODA**: the value of the initial investments - **Negative ODA:** amounts from divestments but limited to a maximum of the initial investment value (excluding dividends and sales gains)	**Yes** – easy to use
(3) Grant equivalent	Calculation of **the difference between face value and net present value** based on an appropriate (expected) risk-adjusted rate of return.	**NO** – The parameters for the calculation are not available upfront. Future reflows are uncertain and no benchmark discount rate available.
(4) Gross cash flows	Equity accounted for on a gross cash basis (face value), no deduction of capital repatriation, dividends and sales proceeds.[1]	**Yes** – very easy to use.
(5) Differentiating between different classes of equity and accounting for some in ODA and other in TOSSD	Calculation based on defining criteria that distinguish between investments considered as concessional in character and investments that are not considered concessional in character. The former would be accounted in ODA on a gross cash basis. The latter in TOSSD on a gross cash basis. Need to define options for making establishing concessionality. These might include country risk; structured risk ; investment horizon; additionality; expected risk-return profile benchmarked against the market (but difficult to define the market).	**NO** – need criteria for conducting appropriate concessionality assessments.
(6) GE ex post with a cap on reflows	Equity will be initially counted as face value and their reflows discounted ex post using differentiated discount rates by income groups, upon exit, applying a cap on reflows equal to the original investment.	**YES/NO : e**x post calculation but need to establish criteria for concessionality assessments.

Recommendations on how to better report on climate-related public equity finance

In the absence of common definitions as well as methods for reporting on climate flows, guiding principles are necessary to ensure transparency, fairness, and consistency in reporting practices by developed countries. Reporting practices up to now have shown that

1 Note that this is how equity are currently being reported by most developed countries under the UNFCCC reporting.

concessionality is not likely to be regarded as a condition for OOF public climate flows in the future. In this working paper, we therefore assumed that non-concessional flows will be reported as public climate finance under the UNFCCC framework in the future.

In the following we draw on the methodological work conducted as part of the OECD DAC modernisation process on how to better account for the use of equity instruments in ODA, and propose a "principled" ranking of potential methodological options for reporting climate-related equity finance to developing countries by Belgium, based on four main guiding principles.

(1) no concessionality required;
(2) A conservative calculation method;
(3) Technical feasibility;
4) Adequate incentive structure.

Overall, the instrument-specific approach seems better suited to report on public climate equity financing to developing countries. Under this approach indeed, information is provided at an activity level, i.e. instrument by instrument which coincides with the ODA measurement of loans to official (public) recipients. The institutional approach, however, is more technically feasible.

Under the instrument-specific approach, Belgian public actors providing climate equity financing to developing countries should try, when information is available, to **include negative reflows**, with a cap on reflows corresponding to the value of initial investment. Equity investments will be initially counted as face value with their reflows discounted ex post. A cap on total reflows is applied that is equal to the original investment.

Note that the previous discussion on ODA will probably deviate from the future methods regarding UNFCCC-framed public climate financing. The main point where the future UNFCCC approach can be expected to deviate from the future development (OECD DAC) approach, is the condition of concessionality. While in discussions on future ODA, concessionality is arguably a crucial condition, it is not expected to be so for public climate finance eligibility. Belgium is likely to follow this division, and include non-concessional flows in public climate finance reporting.

The question arises on which level climate-relevant public flows to multilaterial organisations and funds (such as the GCF) should be reported. We recommend Belgium to keep on reporting those contributions in al reporting exercises. It is up to the UNFCCC and other multilateral institutions to avoid a risk of double counting when calculating total flows on the global level.

Future work on the international level will need to fine-tune the methodologies for tracking and reporting climate finance, more specifically related to the question of the valuation of the non-grant instruments.

1 | Introduction

The valuation of public financial instruments in climate finance reporting still lacks desirable levels of consistency, accuracy, and transparency. With the exception of Germany, which provides budgetary effort figures, developed country parties[2] account for all financial instruments at their *cash face value*, a method which notwithstanding its simplicity, tends to inflate figures related to loans and other non-grant instruments and hence weakens the comparability and reliability of the data.[3] Under the cash face value method indeed, developed countries neither account for potential financial reflows such as loan repayments or investment returns, nor do they consider different degrees of borrowing risks and costs and levels of concessionality.[4] This situation is made worse by the fact that currently, under the UNFCCC, there is no common definition of concessionality and no full clarity on the extent to which concessionality is a requirement for counting non-grant instrument financial flows as public climate finance. Reporting practices up to now have shown[5] that concessionality is not likely to be regarded as a condition for OOF public climate flows in the future. In the remainder of this working paper, **we will therefore assume that non-concessional flows will be reported as public climate finance under the UNFCCC framework in the future**.

To ensure more transparent, robust, and consistent data collection and interpretation over time, improved valuation methods for public climate finance are needed. Special attention should be paid in particular to measurement approaches that can, in contrast to the cash face value method, better reflect the risks and the donor effort involved in providing climate finance to developing countries. While modalities for the accounting of financial resources provided and mobilised through public interventions in accordance with Article 9, Paragraph 7 of the Paris Agreement (PA) are currently being discussed[6], there appears to be a growing recognition even among developed countries[7], that greater clarity, fairness and transparency requires privileging a measurement method that is not based on cash face value, but on more conservative approaches. At this point, however, it is not clear what should be the basis for

2 Reference is made here especially to the UNFCCC Annex II Parties which comprise the OECD members of the Annex I parties but not the economies in transition Parties. Under the convention Annex II Parties are required to provide financial resources to assist developing countries to undertake emissions reduction activities and to help them adapt to the adverse effects of climate change, and required to provide information on financial resources provided. See especially: http://unfccc.int/parties_and_observers/items/2704.php.

3 Current UNFCCC reporting modalities include National Communications (NCs) (every four years) and Biennial Reports (BRs) (every two years) for developed country Parties (esp. Annex I Parties); and Biennial Update Reports (BURs) for developing country Parties. Developed countries also need to report financial information on their official development assistance (ODA) for climate purposes yearly to the Development Assistance Committee (DAC). In the EU, Members States also report information via the EU Monitoring Mechanism Regulation. For an overview of current reporting modalities under the UNFCCC see especially UNFCCC (2015) available at: http://unfccc.int/resource/docs/2015/tp/02.pdf.

4 On this point see especially Weikmans et al. 2016, p. 8; and van der Laan al. 2015, p. 57. As van der Laan et al. (2016, p. 57) explain: "the valuation of public interventions based on cash face value is a simple and transparent method, but it does not take different risk profiles or levels of concession into account. At the same time, the face value valuation method can also create perverse incentives when tracking and calculating the mobilisation potential of public climate finance, as the face-value method does not provide an ideal reflection of the grant element of specific elements (e.g. concessional loans are included for the full nominal value, but the majority of the loan's value will be paid back later on)."

5 See for instance OECD (2015a).

6 See especially: http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf

7 See developed countries' (2015) "Joint Statement on Tracking Progress Towards the USD 100 Billion Goal", Paris, France, 6 September 2015. URL: http://www.news.admin.ch/NSBSubscriber/message/attachments/40866.pdf/

such a method. In the international development community, the attention is drawn to the net support value of financing instruments, expressed notably by the *grant equivalent (GE)* calculation of what is provided. In practice, this would mean that **only grants should be reported at face value in ODA**, while other instruments, such as concessional loans, guarantees, mezzanine finance and equity investments, would be reported **on the basis on the grant equivalent** with their face value added for information purposes. Market-rate loans and other market-rate instruments would be reported in a separate reporting process from the reporting of concessional instruments. A similar method could be promoted in regard to *private* development finance mobilised by public interventions, where ODA reporting should be limited to **private flows that are mobilised by public flows**, although other private flows could be also reported for information purposes.[8]

The GE calculation approach is the method that is currently being used for the measurement of loans in Official Development Assistance (ODA). In 2014 and in an effort to provide a fairer picture of donors' financial support, members of the OECD Development Assistance Committee (DAC) decided to change the measurement of ODA loans from net flows to risk-differentiated grant equivalents.[9] The GE, by representing the concession of a loan based on a specific benchmark discount rate, better helps to capture the "actual" economic value of a loan in ODA, provides for a more realistic comparison of loans and grants and incentivises the use of grants and loans with a higher degree of concessionality.[10] In it modernised version, the calculation of the grant element of loans incorporates a variable benchmark discount rate and concessionality thresholds to better reflect the donors' borrowing costs and risks of providing finance to different developing country groups.[11]

With regard to climate finance however, more research needs to be conducted on assessing the implications, both technical and political, of applying the grant equivalent calculation for the valuation of different financial instruments. From a technical standpoint in particular, one core challenge is to determine whether the method can apply to instruments *other than loans and to equity financing in particular*. The problem essentially, is that whilst the calculation of the GE of the financial flow is relatively straightforward for loans because most of the financial terms of the financial transaction are known upfront,[12] the calculation of the GE of equity instruments is technically difficult for several reasons. They include uncertainty about the amount of future repayments; the highly subjective nature of risk assessments; and the often considerable difference between the expected rate of returns and the actual returns.

Nevertheless, the development of technically feasible and politically credible methods for estimating the public use of non-grant instruments such as equity, is important in the context

8 In regard to mobilised private climate finance, relevant methodological work is currently being undertaken within the framework of The Research Collaborative on Tracking Private Climate Finance. This research group is a OECD-hosted consortium of experts from international financial institutions, the private sector, governments, and non-governmental organizations that is working to develop tools for more accurately tracking mobilized private climate finance. See the Research Collaborative's website for further information: https://www.oecd.org/env/researchcollaborative

9 See OECD 2014a and b. Note that before the 2014 DAC's overhauled treatment of loans in ODA, the entire amount of the loan (with a grant element of at least 25% calculated on the basis of a fixed 10% benchmark discount rate) was counted as ODA [the whole loan was counted as ODA not only the grant element]

10 Ibid.

11 See annex I for a more detailed description of the new OECD DAC method for the measurement of loans.

12 For a detailed description of the method of calculating the GE of loans see especially: Cassimon et al. 2014. See also Annex 1.

of both climate finance and development aid. Not only are these financial instruments increasingly used by a variety of bilateral and multilateral financial intermediaries such as development finance institutions in donor countries (DFIs),[13] they also constitute an increasingly significant and effective source for mobilising and widening the scope of climate-related *private* finance in developing countries.[14]

Hence, the primary objective of this research paper is **to provide the Belgian Development Cooperation with an overview of the variety of methods that can be used to value the provision of public climate finance to developing countries through equity investments.** To date, only the OECD DAC, in the context of its work to modernise ODA reporting post 2015, has started to explore potential methods to better capture in DAC statistical framework the use of private sector instruments such as guarantees and equity.

After a brief description of public equity financing instruments, their strengths, weaknesses and potential implications, this research paper will offer a description and analysis of potential methods discussed as part of the OECD DAC's modernisation of ODA reporting, to quantify donors' provision of finance through private sector instruments (PSIs) and especially via equity instruments. This discussion will support the Belgian Development Cooperation community to improve the reporting of present and future climate financial support provided via equity investments, either directly to companies and projects in developing countries or indirectly through umbrella funds.

13 As explained in a 2015 report by Oxford Consulting Partners on tracking private climate finance flows in reference to the provision of public capital to private investment funds or institutions (p. 14): "It is increasingly common for public sector institutions to deploy public capital through private sector investment funds or financial institution intermediaries. This is a model that is widely deployed by the multilateral development banks and donors to support renewable energy or energy efficiency investment (e.g. credit lines, private equity funds). Private funds offer the public sector reach and scale that cannot otherwise be achieved using traditional delivery models. Often these funds will receive capital at concessional rates, but deploy it on commercial terms, using the concessionality to buy down their own lending or investment risk."

14 For a critical assessment of the capacity of financial intermediaries (FIs) in using public finance to mobilise climate private resources in developing countries see especially an Eurodad report written by J. Pereira 2012 available online at: http://www.eurodad.org/files/pdf/1345788-cashing-in-on-climate-change-assessing-whether-private-funds-can-be-leveraged-to-help-the-poorest-countries-respond-to-climate-challenges.pdf

2 | Public equity financing

Broadly understood, equity financing refers to the provision of capital in a project, company, or fund, in exchange for the ownership of a corresponding share (also labelled 'stock' or equity position) in that company, project or fund's portfolio.[15] Along with debt and de-risking instruments, equity investments are a class of non-grant instruments, in the sense that, unlike grants, they have the potential to generate future financial returns or reflows.[16] In the case of equity however, repayments/returns on investments cannot be guaranteed in advance as they depend on the project's or company's economic performance for the duration of the investment,[17] which is the main reason why equity is generally considered riskier than debt financing. When the project or company is functioning well, financial returns will be generated, resulting in dividend payments, rising share value and the possibility for the investors to sell their shares to other parties. In the event that the project or company is failing – that is when the returns are lower than expected – no dividends will be paid, the value of shares will go down, potentially reaching zero in case of bankruptcy. Note that when bankruptcy occurs, the debt holders involved in the project or the company will always have priority on any available returns over the equity investors.[18] Quasi equity or mezzanine finance is a class of investments products that combine the attributes of equity, in terms of ownership, and debt, in terms of claims to assets in the case of default. Mezzanine finance involves a variety of financial products such as convertible debt, senior subordinated debt or private "mezzanine" securities. As shown in **figure 1** below, structurally mezzanine finance is subordinated in priority of payment to senior debt, but senior in rank to common stock or equity.[19]

15 See especially Caruso and Ellis 2013, p. 22.

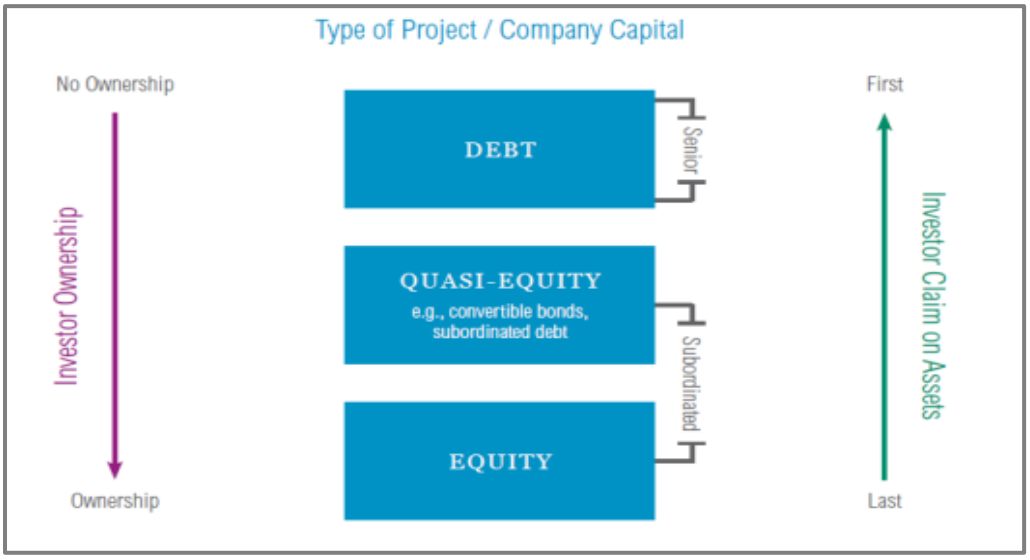
16 See GEF 2014, p. 12 on a more detailed definition of "non-grant instruments".

17 Bachus, Van Herck and Dyck 2015, p. 47; Romero and Van De Poel 2014 (eurodad, p. 21).

18 Bachus et al. 2015, p. 47.

19 Mezzanine finance are out of the scope of this study. As explained however in "Mezzanine finance is useful to project developers in situations where the senior debt sized to meet minimum financial covenants by the company or project is insufficient and equity contributions cannot be increased without falling below expected investor rates of returns (or raising dilution issues). It is often an attractive way to borrow funds for high potential projects beyond the amount that secured senior lenders will lend. Unlike a traditional bank loan, mezzanine finance is unsecured and thus, requires no readily marketable collateral. To compensate for this risk, the rate of interest charged by the lender for mezzanine products is generally higher than that charged on senior debt, and the term of the loan is generally shorter."(source: http://www.climateinvestmentfunds.org/cif /sites/climateinvestmentfunds.org/files/151020%20ADB%20CTF%20Mezzanine%20Finance%20for%20Climate%20Change.pdf)

Figure 1 Equity instruments



Source: Venugopal and Srivastava 2012, p. 3

Equity investments can be made by both private and public actors including foundations. To count as "public" however, equity financing must involve the use of public resources (i.e. national savings) and be channelled through public administrations or national investment vehicles such as sovereign wealth funds or state-owned investment funds or companies.[20]

Equity investments can be considered concessional[21] when (and using a broad definition of concessionality) they flow from an official agency and have the economic development and welfare of developing countries as their main objectives. Most importantly and as for other instruments (e.g. loans, guarantees) they should be offered to developing countries **on terms clearly more generous that those currently prevailing on the market**. In more concrete terms, this means that equity can be concessional when the investor requires a lower risk-adjusted rate of return (lower return for the risk undertaken), or acquires the equity at a less favourable price than commercial investors. Equity investment in this case, enables to finance projects that commercial investors would not normally finance for such an expected rate of return.[22] As we will see below in regard to the modernisation of the OECD DAC statistical system, the emphasis in ODA on actual flows and budgetary efforts has in recent years tended to discourage donors from using equity investments as well as other private sector instruments (e.g. guarantees) even though those might be provided at concessional level.

20 UNEP FI 2014, p. 28.

21 It is important to note that concessionality, although a crucial condition for ODA eligibility, will most likely not be regarded as a condition for eligibility as public climate finance under UNFCCC in the future.

22 The concessionality of finance provided to the private sector is a new topic in development finance. For "informal" guidance on the use of concessional finance in the private sector see a 2013 note prepared by a working group consisting of representatives from the Private Sector Roundtable at the EBRD (European Bank for Reconstruction and Development): http://www.ebrd.com/downloads/news/roundtable.pdf. See especially p. 5 for a discussion of concessionality in relation to equity instruments.

In the context of development and climate-related public finance, three main types of equity instruments are generally available:[23]

(i) **Direct equity investments** (also known as 'common equity') involves direct capital contributions in projects or companies (e.g. low carbon climate resilient (LCR) projects).

(ii) **Shares in equity funds** (also known as "equity funds-of-funds or umbrella funds or shares in collective investment vehicles (CIVs)). Equity funds are collective investment vehicles or undertakings that allow investors to pool their funds, diversify their risks and share them among a greater number of shareholders. Equity funds often serve as financial intermediaries that provide direct equity investments in other companies, projects, or banks.

(iii) The third category of equity instruments is **preferred equity** (also labelled mezzanine finance), i.e. preferred stocks in companies developing and/or implementing LCR activities in developing countries. Preferred equity refers to a category of shares in a company that has a higher claim on the assets and earnings than common equity.

As described in more details below, in Belgium and in the context of public climate finance provided to developing countries, two equity contributions have been made up to now, both of which are in the category of shares in equity funds (type (ii) as described above). The first contribution was a capital contribution by the Directorate General for Co-operation and Development (DGD) to the Green Climate Fund (GCF) of € 10 mio and shares in an equity fund by the Belgian Investment Company for Developing Countries (BIO), of USD 10 mio.

The provision of financing to low-carbon climate resilient projects through equity investments has several advantages, chief among them is the capacity to scale-up the availability of equity and debt finance for climate-relevant projects.[24] Some projects, especially those taking place in least-developed countries, present significant commercial and political risks to commercial/private investors. Equity financing by donors or DFIs or equity funds that directly provide capital to grow the operation of a project or company can send a strong signal about the future financial viability of a project thereby potentially creating attractive investment conditions that may convince private actors to grant commercial loans to the project.[25] The bottom line is that equity investments by donors or other public institutions with a clear climate change/development mandate have the potential to catalyse private investments in projects that would otherwise not have happened with commercial financing only.

Equity financing is, of course, not without its own set of challenges and risks both to the public investors and the private investee. There is first the risk of "crowding out", which occurs when the presence of public investors, instead of structuring investments in ways that encourage the participation of private investors, actually discourage them from providing capital. The public ownership of a company for instance might signal in some cases increased bureaucracy and higher regulatory standards.[26] The second issue concerns the high transaction costs involved

23 Pereira 2012, p. 8.
24 Caruso and Ellis 2012, p. 2.
25 See especially Linderberg 2014, p. 15 and UNEP FI 2014.
26 Ibid.

with the provision of capital through equity financing, hence the reason why equity investments generally apply to large projects. Third, there is a risk of distortion of market conditions due to the advantages that risk financing confer to the beneficiaries (whether investors or enterprises). Last but not least, and as mentioned above already, equity finance is generally riskier than other non-grant instruments such as guarantees and debts, since repayments are never guaranteed and, in case of bankruptcy, equity investors will be the last to be repaid.

In Belgium, BIO Invest, is currently involved in providing a USD 10 mio climate-related investment in the form of equity in the Africa Renewable Energy Fund (AREF). Since BIO has an explicit development objective, its equity investment can be regarded as (at least partly) concessional.
The AREF is a USD 200 million equity fund that invests in renewable energy projects in Sub-Saharan African countries. The Fund is an initiative of the African Development Bank and the Sustainable Energy Fund for Africa. Both provided significant financial and technical support to assist the Fund in financing specific project development costs.[27]

In 2016, DGD made a capital contribution of € 10 million to finance the activities of the Green Climate Fund (GCF). Capital contributions (i.e. equity) to the GCF shall be used to finance the activities of the Fund's implementing agencies that are susceptible to generate reflows, independent of the concessionality level. However, as DGD has not imposed tailor-made modalities for this contribution, reflows will be limited to repayment when the GCF will be liquidated. In the meantime, the investment cannot be resold, and no reflows will take place.
In general, capital contributions cannot be used to finance grants or administrative costs, unless allowed by the modalities imposed by the donor. In case the Fund is liquidated, DGD is entitled to be paid back in full and to receive a proportion of the profits, such as earned interest or dividends depending on the availability of such funds at the time of the liquidation.[28]
It is not possible to unambiguously label the DGD equity investment as 'concessional' or 'non-concessional'. This depends on the outflow policies of the GCF. However, as the GCF is more aimed at providing concessional than non-concessional support (GCF, 2015), the DGD investment can equally be regarded as '*concessional for the most part*'.
Contributions to the GCF and other multilaterial Funds, development banks and DFIs are reported by the donor country (inflows for the fund) and the fund itself (outflows by the fund). In order to avoid double counting, the inflows for the fund should be substracted when calculating the total climate flows.

27 For more details on BIO's investment in the form of equity in the AREF see: http://www.bio-invest.be/en/portfolio/africa/details/193.html?mn=1
28 See CGF 2014, p. 5-7 and Bachus et a. 2015, p. 26

3 | How to report equity: Inputs from the modernisation of the OECD DAC Statistical System

3.1 Modernisation of the OECD DAC statistical system and the valorisation of the use of PSIs in ODA

In December 2014, as part of the global efforts to come to a better mapping of the financial resources required for the 2030 Sustainable Development Agenda and to ensure their transparency and accountability, members of the OECD DAC launched a process of modernising their statistical system (system for measuring ODA).[29] One of the key objectives of this process[30] was to improve the representation of the donor effort involved in extending private sector instruments (PSIs) in external development finance, to reduce the current disincentives for their use and encourage greater engagement with the private sector in developing countries.[31] As we will see below, these efforts have led to two distinct approaches to measuring the donor effort in providing private sector instruments such as equity in ODA, namely, **the institutional and the instrument-specific approaches**, with the institutional approach focusing on the donor's contributions to ODA-eligible vehicles located in the donor country, and the instrument approach measuring the donor effort at the instrument/activity level, similarly to the current measurement of loans to official (public) recipients.

The term PSI encompasses all financial instruments excluding grants and sovereign loans[32] (i.e. loans, guarantees, mezzanine finance, and equity) provided by the official sector to private or public sector recipients.[33] PSIs can also be defined more narrowly, to refer to loans, guarantees, mezzanine finance and equity provided only to private enterprises. In the OECD DAC context, the two definitions of the term PSI are used interchangeably. As seen in the figure reproduced below **(figure 2)**, in development finance, PSIs are deployed by development finance institutions (DFIs) and other financial intermediaries (e.g. aid agencies, project finance and export banks and investments funds), but also directly by the Treasury Departments of donor governments. Recipients of this type of financing include official institutions, private-sector organisations, and public-private partnerships. DFIs' recipients are only private sector organisations, while development banks principally fund recipients from the official sector.[34] PSIs are usually offered on non-concessional terms for investments with the potential to generate economic returns.

29 OECD 2014a

30 The modernisation of ODA measure encompasses three main objectives: 1) A revised method for recording sovereign loans, 2) an improved representation of the role of private sector instruments while offering the right incentives (and removing disincentives) for the use of these instruments, and 3) clarifying the eligibility of peace and security efforts. See http://www.oecd.org/dac/financing-sustainable-development/modernisation-dac-statistical-system.htm for an overview of the modernisation of the OECD DAC statistical system.

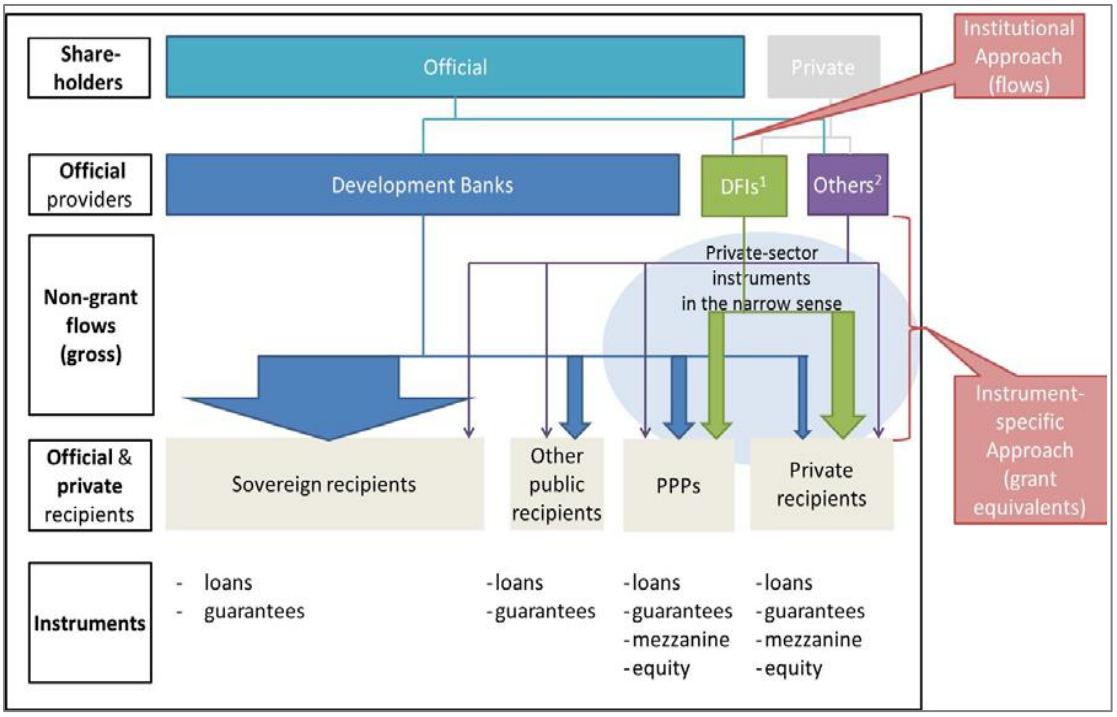
31 *Ibid.,* and OECD 2014b. .

32 Sovereign loans are loans guaranteed by a state entity

33 OECD 2015b, p. 6.

34 OECD 2015b, p. 5; OECD 2014b.

Figure 2. Private sector instruments in bilateral development cooperation



Source: OECD 2015b, p. 6

Despite improvements over the past few years in reporting information on private sector instruments in DAC statistics, current reporting practices tend to vary widely across member states. More importantly, the DAC statistical system and the reporting of ODA based on cash-flows and net-disbursements, tend to discourage their use: under the current system indeed, both mezzanine finance and equity financing are either non-ODA eligible or result in negative ODA in case of higher returns or positive sales proceeds; guarantees for their part are only captured in ODA if they are activated (as they do not generate an initial flow from the official sector). In other terms, because of current modalities, positive ODA in relation to the use of PSIs occur only when guarantees are activated or in case of failed or weak equity investments.[35] This means essentially that the current statistical system tends to penalize successful PSIs and reward those that fail, thereby discouraging their use in ODA.

This is mainly the reason why over the past two years, members of the OECD DAC have been exploring the question of how these instruments could be better valorised within ODA and the new measure of Total Official Support for Sustainable Development (TOSSD). With respect to ODA however, these efforts have met several technical and political challenges. One challenge has to do with the question of their concessionality, and whether these instruments can possibly be considered concessional and if so, on which terms. Note that there is presently no commonly agreed definition of what concessionality entails in relation to these instruments (except for loans provided to public/official institutions), which makes the quest for establishing common standards even more challenging. The second issue concerns the

35 OECD 2014b, p1.

quantification method and whether the calculation of the grant equivalent is applicable to instruments such as equity that have uncertain payoffs.

It is with these challenges as background that DAC members at the 2016 High Level Meeting (HLM) in February, agreed on a series of guiding principles and methods related notably to criteria for ODA eligibility, measuring arrangements, and transparency and monitoring provisions.[36] Substantial work still remains to be done on the detailed implementation of these principles (inter alia, thresholds, assessment criteria, definition of additionality, definition of a lock-in period for changing the measurement approach, risk premium, discount rates and reporting requirements and data disclosure). To ensure the feasibility and viability of these new measures, and provide for necessary adjustments, the DAC secretariat is expected to conduct an assessment review two years after their implementation.[37] Decisions on the detailed implementation of new measures of ODA were expected at the OECD DAC Senior-Level Meeting in October 2016, but no public information has been released to date.

A detailed description of this set of principles is available in the Annex of the communiqué of the 2016 HLM.[38] Before discussing the debates surrounding the measurement of equity instruments in ODA, two points are worth mentioning here, concerning: (i) the question of ODA eligibility; or what will be counted as ODA in the new measurement system; and (ii) the question of measurement points.

ODA eligibility: under the modernised system, the effort of the official sector in deploying PSIs will be counted in ODA, while the financial flows themselves will be captured in the broader measures on flows for sustainable development (TOSSD).

Two different approaches to measurement: two different approaches for measuring the effort of the official sector in providing PSI have been developed, i.e. the institutional and the instrument-specific approach (see figure 3).

- Under *the **institutional approach***,[39] the donor effort will be measured on the basis of the funds that the donor government may extend to its DFI (or other relevant vehicle in the donor country) providing a PSI to developing countries. These include capital injections in – and divestments from – the DFI or bilateral vehicle by the donor. This approach has no link with the type of instruments used by the vehicle, nor with the volume and the concessionality level of the finance provided. The outflows from the financial vehicle to developing countries in turn will be reported under the new measure of TOSSD.
- Under *the **instrument-specific approach***, the effort will be measured for each PSI transaction between the vehicle and the private enterprise or institution in the developing country. Under this approach, PSI are captured in ODA in the same manner as sovereign loans, i.e. ODA would account for the grant equivalent of such instruments. Just as with

36 See OECD 2016, Annex 1.

37 *Ibid.,* p. 1.

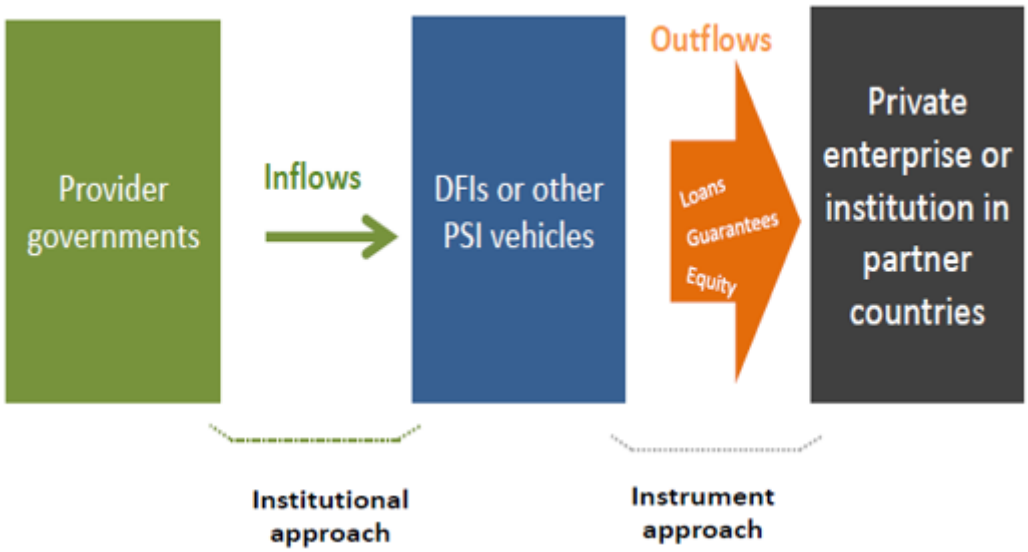
38 Ibid.

39 The institutional approach has been especially advanced by the governments of Switzerland, Norway, and the UK in an effort to promote a consistent statistical treatment of bilateral DFIs with international finance institutions (IFIs) (see OECD 2015b, p. 8).

the institutional approach, total outflows from providers would not be captured in ODA but under the new measure of TOSSD.

In order to minimise the risks of double counting, countries are required to select one approach for each financial vehicle in their ODA reporting. They can change the approach selected, granting prior notification and verification to the ODA secretariat. Moreover, and to ensure the credibility and comparability of members' reporting over time, a lock-in period during which the approach may not be changed is to be determined.

Figure 3. Institutional and instrument-specific approaches to reporting



Source: Benn (2016)

3.2 Measuring equity in ODA: overview of proposed options

The two approaches lead to distinct ways of estimating equity and other PSIs in ODA. The Institutional approach appears less technically challenging (at least for equity) than the instrument-specific approach, since the reporting of the donor's contributions is based on a net flow basis (rather than the grant equivalent calculation). However, and because of this, the reporting of equity investments under the institutional approach still faces the same problems as the current reporting method under ODA, which tends to give higher recognition to failed rather than successful public interventions.

3.2.1 Reporting equity under the institutional approach

The implementation of the institutional approach requires clear criteria of what counts as a ODA-eligible DFI or bilateral vehicle. These criteria still need further elaboration by DAC members. At the last High Level Meeting in February 2016, it was proposed that the assessment should be based on an examination of the vehicle's mandate, project portfolio, investment strategy and due diligence mechanisms. In particular, it should focus on the extent

to which the institution allocates its finance to ODA-eligible countries and operates with the economic development and welfare of developing countries as its main objective. In case the institution is active in non-eligible countries or for non-eligible activity-areas, it was suggested to calculate a coefficient for ODA to determine the share of funds provided to the DFI by the donor government that can be counted as ODA. As far as Belgium is concerned, it is clear that both BIO and the Belgian Corporation for International Investment (SBI-BMI) can both be considered as ODA-eligible financial vehicles.

As mentioned earlier, under the institutional approach, the donor effort in extending PSIs to a developing country will be measured on the basis of donor government capital injections (and potentially reinvested earnings) in and divestments from the ODA-eligible DFI. The calculation method proposed by DAC members at the 2016 High-Level Meeting in February suggests to treat capital investments in - and divestments from - DFIs by the donor government, the same way as they are treated under current ODA reporting rules, i.e. on a net flow basis. As explained earlier, this method does not appropriately mitigate the risks of generating negative net ODA for DFIs that are successful and generate reflows to their shareholders. Under this method indeed, DGD's capital contributions (i.e. equity) to a Belgian DFI (e.g. BIO) would be treated as a sunk cost, initially reported in ODA as face value (value of the initial investment), with potential future reflows counted as negative ODA. In regard to climate-related finance, a potential coefficient would need to be established to report only the shares of the DGD's funds used by the DFI for climate-relevant purposes. Essentially, this would require a detailed overview of the climate-relevance of the DFI's (i.e. BIO) portfolio activities regardless of the instruments used.

The Belgian government, for instance, has provided equity investments in BIO, which it can use as capital to do its investments. BIO is considered as an ODA-eligible DFI. Measuring Belgium's contribution effort would require first and foremost estimating the share of the flows provided to BIO that are climate relevant. This share can then be reported as positive public climate finance. Any divestments from BIO shall then later be counted as negative ODA-related climate finance.

3.2.2 Reporting equity under the instrument-specific approach

Under the instrument-specific approach, the quantification method varies depending on the type of PSI used by a vehicle to provide financing to a private enterprise or partner institution in a developing country. For all instruments however, it was agreed that the donor effort should be calculated (whenever possible) based on the estimation of the grant equivalent and only instruments providing finance at concessional level (i.e. instruments provided below market rates) should be included in ODA.[40] Note that this concessionality criterion ultimately requires determining for each instrument whether the instrument is concessional in character and to what extent (OECD 2015b, p. 18).

40 OECD 2015b, p. 6.

However, and as mentioned at the onset of this paper, the calculation of the grant equivalent portion or concessionality of equity investments is technically challenging: neither the appropriate discount rate, nor future cash flows can be known upfront.[41] These difficulties notwithstanding, at a 2014 Expert Reference Group Meeting on "better representing the donor effort in non-grant instruments," several options for reporting on equity investments[42] in ODA were put on the table for further discussion.[43] The evaluation of these methodological options was based mainly on two criteria: their technical feasibility and their incentive structure (i.e. whether they incentivise the use of equity financing in ODA and avoid giving greater weight or recognition to projects that fail rather than succeed, cf. supra). A detailed description of these methods has been provided elsewhere (see Annex 1 OECD 2014b provided in Annex 2). The following table lists and describes the methods proposed in accordance with the two evaluation criteria of technical feasibility and incentive structure.

41 As noted earlier, the grant element determines the level of concessionality of an instrument and depends on the financial terms of a financial transaction. For loans for instance, the GE calculation depends on the interest rate, the maturity, the grace period of the loan and the discount rate used to convert the future repayments to present value. The GE of a loan is the difference between the face value of the loan and the present value of repayments expressed as a percentage of the face value of the loan. (see annex 1 for the calculation method for the GE of loans).

42 Note that those do not include preferred equity instruments which now belongs to the category of mezzanine finance instruments.

43 These methods were proposed at a June 2014 expert reference group meeting on "Better representing the donor effort in non-grant instruments." See Annex 1, OECD 2014b.

Table 1 - Proposed options [44]for reporting equity under the instrument-specific approach

Methodological options	Description	Maximum & Minimum ODA	Technical Feasibility	Incentive Structure
(1) Net cash flows	Current method of reporting in DAC statistics: Reporting as: - **Positive ODA**: the amounts of initial investments - **Negative ODA:** the amounts of from divestments (dividends are not included)	Maximum ODA: initial investment value Minimum ODA: negative	**Yes** – Easy to use	**NO** – gives highest recognition to failed projects. The better the investee businesses perform (substantiated by a higher investment return) the lower the ODA contribution (negative)
(2) Net cash flows limited to initial investment value	Reporting as: - **Positive ODA**: the value of the initial investments - **Negative ODA:** amounts from divestments but limited to a maximum of the initial investment value (excluding dividends and sales gains)	Maximum ODA: initial investment value Minimum ODA: zero	**Yes** – easy to use	**NO** but better than (1): measurement gives highest recognition to failed projects but limits the negative impact of successful projects.
(3) Grant equivalent	Calculation of **the difference between face value and net present value** based on an appropriate (expected) risk-adjusted rate of	Maximum= Minimum ODA: the estimation of the grant equivalent	**NO** – The parameters for the calculation are not available	NEUTRAL

44 Note that this table summarises the discussion under the OECD DAC modernisation effort of ODA, in which concessionality and grant equivalent approaches will gain a central position. However, this will probably not be the case for climate financing, where concessionality will most likely not be a condition in the future. As a result, it is important to note that this table does not provide an overview of the options for climate change.

	return.		upfront. Future reflows are uncertain and no benchmark discount rate available.	
(4) Gross cash flows	Equity accounted for on a gross cash basis (face value), no deduction of capital repatriation, dividends and sales proceeds.[45]	Maximum ODA = Minimum ODA = Face value	**Yes** – very easy to use.	**PERVERSE**: incentives biased in favour of equity investments independent of whether they are successful or not. This would lead to an overestimation of the donor effort. Politically not feasible for lack of fairness and credibility.
(5) Differentiat-ing between different classes of equity and accounting for some in ODA and other in TOSSD	Calculation based on defining criteria that distinguish between investments considered as concessional in character and investments that are not considered concessional in character. The former would be accounted in ODA on a gross cash basis. The latter in TOSSD on a gross cash basis. Need for defining options for establishing concessionality. These might include country risk; structured risk; investment horizon; additionality; expected risk-return profile	Maximum ODA = Minimum ODA = face value	**NO** – need criteria for conducting appropriate concessionality assessments.	**YES**: incentivises investments in high-risk environments/or enterprises with lower than commercially expected (or hardly any) return in principle. Depends on how the line between concessional vs. non-concessional equity investments is established in practice.

45 Note that this is how equity are currently being reported by most developed countries under the UNFCCC reporting.

	benchmarked against the market (but difficult to define the market).			
(6) GE ex post with a cap on reflows	Equity will be initially counted as face value and their reflows disco unted ex post using differentiated discount rates by income groups, upon exit, applying a cap on reflows equal to the original investment.	Maximum ODA = GE calculated ex post Minimum ODA =cannot be lower than zero	**YES/NO:** ex post calculation but need to establish criteria for concessionality assessments.	**NEUTRAL –** The cap on reflows equal to the value of the initial investment works to reduce the negative impacts of successful investments**.**

Source: OECD 2014a, Annex 1

What the table suggests is that the most theoretically desirable measurement methods, methods 3, 5 and 6, are also the ones that are the least technically feasible.

- **Method (3) Calculation of the GE ex ante:** as mentioned earlier, measurements of the GE of equity investments ultimately require a wide set of estimates that are most often not available upfront or remain highly uncertain (i.e. amount of future proceeds and discount rate). The risks associated with equity investments are also highly subjective. This means that figures based on the ex-ante calculation of the GE of equity investments, cannot fully reflect the donor's actual effort in providing these investments.
- **Method (5):** the measurement method based on the **differentiation of different classes of equity** is less technically challenging than the measurement of GE but requires the future development of practically feasible and politically credible criteria and principles for determining for instance the ODA boundary and for differentiating between concessional vs. non-concessional equity.
- **Method (6)**: the method that OECD DAC members recently selected combines two of the methods described above, namely (2) and (3). This is the method (6) which involves **a calculation of the GE ex post** with a **cap on reflows** corresponding to the value of the initial investment. This means that equity investments by DFIs and other bilateral vehicles to private enterprises in developing countries will be initially counted as face value and their reflows discounted ex post using differentiated discount rates by income groups, upon exit, applying a cap on reflows equal to the original investment. Under this method then, maximum ODA corresponds to the grant equivalent calculated ex post and minimum ODA cannot be lower than zero. In terms of the incentive structure, this method, like the GE method, is neutral and by applying a cap on reflows, works to reduce/limit the negative impact of successful projects, i.e. limits the amount of negative ODA flows reported in case of successful projects. Members of the DAC proposed that this method can be replaced by the calculation of the GE ex ante, if enough information is available to estimate future reflows and the risks undertaken. The calculation of the GE ex ante will be done then on a case-by-case basis and will be adjusted ex post. More work needs to be conducted in partnership with DFIs to further explore the technical feasibility of calculating the grant equivalents ex ante, adjusted ex post, to establish estimates in terms of expected maturities, risk premia and target yield. There also is a need to determine the appropriate discount rates for this type of calculation.

4 | Conclusion - how to best value public climate equity financing in Belgium: a ranking of methodological options

Despite continuing efforts both under and outside the UNFCCC to strengthen existing procedures and modalities for the reporting of public climate finance, there is to date no commonly agreed definitions of basic categories relevant to the reporting process, i.e. climate finance; new and additional, concessionality.
Reporting practices up to now have shown[46] that concessionality is not likely to be regarded as a condition for OOF public climate flows in the future. In this working paper, **we therefore assumed that non-concessional flows will be reported as public climate finance under the UNFCCC framework in the future**.

In the following we propose a "principled" ranking of potential methodological options based on four main guiding principles.

(1) no concessionality required: climate-related equity instruments provided to developing countries do not need to be concessional to be eligible for public climate finance reporting.

(2) A conservative calculation method: reporting practices by BE public actors should, whenever possible, reflect a conservative approach which effectively minimises the risks of overestimation of financial flows. This requires in practice, a calculation of financial flows based on net cash flows whereby potential financial returns are reported as negative climate finance. It also means that in case of doubts on the actual climate or development contribution of the flow, it will not be reported.

(3) Technical feasibility: the calculation method chosen to provide for an appropriate picture of public climate finance to developing countries through equity investments, should not be too technically challenging.

4) Adequate incentive structure: similarly to the reporting of the use of PSIs in ODA, the reporting of equity instruments in public climate finance should not unnecessarily disincentivise their use by giving more weight to investments that fail rather than those that succeed. In practice, this might necessitate a cap on the reporting of divestments equal to the amount of the initial investment.

Overall, the instrument-specific approach seems better suited to report on public climate equity financing to developing countries. Under this approach indeed, information is provided at an activity level, i.e. instrument by instrument which coincides with the ODA measurement of loans to official (public) recipients. The institutional approach, however, is more technically feasible.

Under the instrument-specific approach, Belgian public actors providing climate equity financing to developing countries should try, when information is available, **to include**

46 See for instance OECD (2015a).

negative reflows, with a cap on reflows corresponding to the value of initial investment. Equity investments will be initially counted as face value with their reflows discounted ex post. A cap on total reflows is applied that is equal to the original investment.

Note that the previous discussion on ODA will probably deviate from the future methods regarding UNFCCC-framed public climate financing. The main point where the future UNFCCC approach can be expected to deviate from the future development (OECD DAC) approach, is the condition of concessionality. While in discussions on future ODA, concessionality is arguably a crucial condition, it is not expected to be so for public climate finance eligibility. Belgium is likely to follow this division, and include non-concessional flows in public climate finance reporting.

The question arises on which level climate-relevant public flows to multilaterial organisations and funds (such as the GCF) should be reported. We recommend Belgium to keep on reporting those contributions in al reporting exercises. It is up to the UNFCCC and other multilateral institutions to avoid a risk of double counting when calculating total flows on the global level.

Future work on the international level will need to fine-tune the methodologies for tracking and reporting climate finance, more specifically related to the question of the valuation of the non-grant instruments.

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Annexes

Annex 1 – Measurement of loans in ODA : before and after the OECD DAC Modernisation

	BEFORE: **CASH FLOWS**	AFTER: **GRANT EQUIVALENTS**
Grant Element Thresholds	**25 %**	- 45% for LDCs and LICs - 15% for LMICs - 10% for UMICs
Discount Rates	10% Used for assessing the concessionality of a loan	5% base (current IMF discount rate) + adjustment factors of o 4% for LDCs and other LICs o 2% for LMICs o 1% for UMICs Used for both assessing the concessionality of a loan (does it meet the threshold?) and for calculating its ODA grant equivalent.
Measurement system	Positive ODA when disbursed, negative ODA when repaid.	Grant equivalent of loan disbursements (grant element multiplied by amount disbursed). Repayment of past loans is not subtracted from ODA but will continue to be collected and published. Clear, quantifiable measure of concessionality that is tighter than what existed before. The softer the terms and conditions of the loan, the more ODA credit the provider receives. Grants score more ODA than loans.

Source: OECD 2014a, p. 2

Calculation of the GE of loans:
The GE accounts for the level of concessionality of a loan which depends on the transaction's financial terms such as (i) the interest rate, (ii) the maturity, (iii) the grace period of the loan, and (iv) the discount rate used to convert future repayments to present value.
The GE compares the repayments the provider would get by lending at a certain interest rate with the repayments it could have expected to receive by lending at a specific benchmark rate (the benchmark discount rate).
This calculation involves estimating the present value (PV) of future repayments using the benchmark rate as a discount rate.
The formula for calculating the GE of loans is as follows: GE: (Loan face value – PV of repayments)/loan face value
The GE of a loan is the difference between the face value of the loan and the present value of the repayments, expressed as a percentage of the face value of the loan. The higher the discount rate the lower the expected concessionality of the loan.

Annex 2 – Possible Options for Measuring Equity in ODA

Proposed during the Expert Reference Group Meeting – 26-27 June 2014, Session 3 "Better Representing the donor effort in non-grant instruments – principles and methods" – Annex 1. ULR: https://www.oecd.org/dac/financing-sustainable-development/2014_06_ERG_Session%203%20Background%20paper%20final.pdf.

1) **Measurement of net cash flows**, i.e. disbursement from initial investments are reported as positive entry in ODA and amounts received from divestments are reported as negative entry in ODA (no consideration of dividends).[2] Thus, successful investments - i.e. investments that have supported a sustainable and profitable business - generate negative ODA over time because the amounts flowing back are higher than the amount initially invested. On the other hand, investments in unsustainable or even failed businesses are generating positive ODA as the repayment amounts fall short of the initial investment.

- Maximum ODA: initial investment value
- Minimum ODA: negative
- Incentive implications: Measurement gives highest recognition to failed projects. The better investee businesses perform (substantiated by a higher investment returns), the lower the ODA contribution (negative).

This is the current method of reporting on equity in ODA. (However, not all DAC members' DFIs are reporting on equity in DAC statistics. Consequently, DFI operations are currently not accurately recorded.)

2) **Measurement of net cash flows limited to initial investment value**, i.e. amounts of the initial investment are reported as positive entry in ODA and amounts received from divestments are still reported as negative entry in ODA but limited to a maximum of the initial investment value. This means that the repatriation of capital would still be accounted for as a negative flow but not any dividends and sales gains. This would mirror the current treatment of ODA-eligible loans for which only principal but no interest repayment is accounted for in the net measure. Thus, successful investments are eventually counted as zero in ODA statistics (same as loans in the current system) whereas unsuccessful investments produce positive ODA.

- Maximum ODA: initial investment value
- Minimum ODA: zero
- Incentive implications: Measurement still gives highest recognition to failed projects but limits the negative impact of successful projects.

This adaption of 1) would align the reporting of market-based instruments to the current reporting practise on loans and thereby potentially reduces the disincentives to report on the former.

3) **Measurement of grant equivalents**, i.e. difference between face value and net present value calculated with an appropriate (expected) risk-adjusted rate of return. Theoretically desirable but practically challenging for different reasons; the major one being that future proceeds are uncertain and the risk assessment is highly subjective. While investment decisions by any financial institution (FI) are based on an expected rate of return, the

calculation of which is based on a wide set of estimates, the actual results can and do differ considerably. This means that an anticipated grant equivalent for any given equity investment is very unlikely to capture the true effort of the donor in providing the investment. The effect is limited in FIs by taking a portfolio view in which the outliers are netting themselves off, resulting in the actual portfolio return getting closer to the anticipated one. However, the results will still differ widely amongst institutions, portfolios as well as inter-temporally.

- Maximum = Minimum ODA: grant equivalent
- Incentive scheme: Neutral when compared to other types of loan and equity investment as long as a risk-adjusted discount rate is used. However, neither the appropriate discount rate nor future cash flows are known upfront, i.e. parameters for the calculation are not available.

This method would fit in best with the currently discussed shift of the ODA accounting of loans from net flows to grant equivalents. There are, however, technical issues of how to calculate this.

Is there a way to calculate or approximate a grant equivalent for equity? Could ODA be based on the provisions made by the investing financial institution? What assumption would need to be made?

4) **Measurement of gross cash flows**, i.e. equity is accounted for on a gross cash basis (face value), no deduction of capital repatriation, dividends and sales proceeds. This would mean that equity is treated the same way as grants whereas the recovery of the initial investment value as well as value gains are generally expected on an aggregated average level. While it is a technically feasible measure to recognise and not "punish" successful equity investments, it is likely to result in an overestimation of the donor effort.

- Maximum = Minimum ODA = face value
- Incentive scheme: Incentives biased in favour of equity investments.

Politically not feasible since most DAC members would object this option for lack of fairness and credibility.

5) **Differentiating between different classes of equity and accounting for some in ODA and others in TOSD**, i.e. instead of trying to calculate the provider effort by trying to measure and account for concessions, if any, embedded in these instruments, define criteria that draw a line between investments considered as concessional in character and investments that are not considered concessional in character. The former would be accounted for in ODA on a gross cash basis. The latter would be accounted for in TOSD on a gross cash basis. Options for distinguishing may include but are not limited to country risk (e.g. investments in the riskiest countries as classified by the OECD country risk classification may be considered concessional by definition), structured risk (e.g. first-loss shares that provide a risk protection to superior equity investors, noteholders and other creditors may be considered concessional by definition), investment horizon (e.g. investments with a holding period above a certain threshold may be considered concessional by definition), additionality (e.g. primary issues are considered more developmental and riskier and more concessional than secondary trades). Another obvious criterion is the expected risk-return profile that could be benchmarked against the market to draw the line between concessional and non-concessional investments. However, defining the market would be challenging.

- Maximum = Minimum ODA = face value
- Incentive scheme: Does incentivise equity investments in high-risk environments and/or enterprises with a lower than commercially expected (or hardly any) return in principle. Depends on how the line is drawn in reality.

May be a technically and politically feasible compromise.

What should be the principles in defining the ODA boundary? Which criteria (or combination of criteria) for differentiating between concessional and non-concessional equity may be considered practically feasible and politically credible?